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Sent: Tuesday, December 12, 2006 1:28 PM

To: MLPAComments@resources.ca.gov

Subject: MLPAComments: MPA monitoring plan, draft final (12-6-06)

Given the importance of the ecosystem concept and the frequency of reference, an operational definition of "ecosystem" is critical. This should, however, make explicit that ecosystems do not have clear boundaries and generally encompass much larger areas than may be defined by an MPA or network thereof.

Indicate the key components and processes that will be monitored--or address the process by which you plan to identify and select them.

p. 5

I don't believe that an MPA "protects" an ecosystem by curtailing fishing; I think that what is meant here is that, by creating fisheries exclusion zones, one may be able to temper the effect of fishing on an ecosystem. I feel the statement given is an over-simplification and neglects the importance of other anthropogenic effects (e.g. pollution, habitat degradation).

Few if any ecosystems are going to be contained by an MPA. If you are defining an ecosystem such that it may be contained wholly within an MPA, I'd question such a definition.

Indicators for ecosystem struct/func must include interactions as well as biodiversity measures.

The comment that, "If the MPA serves as a nursery, juvenile recruitment should be enhanced" is sloppy: Enhanced where? Is the protection afforded by MPA designation going to result in increased nursery function at that location? And that means more self recruitment? Or recruitment outside the MPA?

p. 6 (Population Monitoring)

Again, rarely will populations be contained within a MPA...You might say that MPAs provide a refuge wherein one might find a size/age/genetic (subpopulation?) structure similar to an unexploited population. Also, I wonder how realistic that might be if fishing and other anthropogenic impacts continue (inside or out the network). This is addressed on p. 9, but should be addressed when first introduced.

p. 10

(Good, sober comment on the contrib of MPAs to fisheries restoration...)

p. 13

With studies conducted in nature, it IS possible to control some factors (e.g. fishing, kelp density, boat traffic, etc).

p. 14

How good are the spatial data on commercial fishing collected by Ecotrust? I think that a very useful tool in monitoring the efficacy of the MLPA would be the introduction of a State-funded VMS for all commercial vessels and all CPFVs. (I'd love to see them on recreational boats too, but that isn't exactly likely!)

p. 15 (Performance measures)

By abundance do you mean numbers or biomass?

Survey methods are biased towards visual means. Some of this is fine, but I think CDFG should be developing a monitoring strategy that can be applied +/- uniformly the length of the coast. SCUBA and ROV/submersible work is largely untenable here on the North Coast (poor visibility). Greater effort should go into the use of such techniques as commercial fishing gear (eg. stick, gillnet) and traps. Rick Starr's efforts at comparing survey methods is an important start. I should point out that I'm not without bias here: I've been working on a trap design for ground fish that is highly effective, cheap and easy to build; I think it should be used as a tool for precisely this kind of effort.

p. 22, Table 8.

Why brown rockfish and not kelp rockfish (*S. atrovirens*)? The latter, I think, is more abundant and a larger component of the rec fisheries (vs comm).

p. 23

Trawls are an excellent means of monitoring soft bottom habitat; it can be done in such a way as to keep habitat impacts negligible.

p. 28

The Coastal Observations And Seabird Survey Team (www.coasst.org with which I am affiliated) trains volunteers to monitor designated stretches of beach on a monthly basis. COASST volunteers count and identify beach-cast seabird carcasses from Humboldt County North to the Canadian border. We are working on extending our network South. The program generates high quality data for very little cost and, by monitoring seabird populations, provides a very good measure of coastal ecosystem health and function. Obviously this doesn't offer the Central Coast anything at present...but this could be rectified!

p. 29

I wasn't aware--and am doubtful!--that the Northern Elephant Seal was a keystone species...particularly for the California Current ecosystem. As I recall, these animals feed far offshore and I wonder how much of an impact (except as shark food) these animals have on coastal systems. Not saying they aren't important, but I'd avoid using reasonably well-defined terms indiscriminately.

p. 30

Again, traps, trawls and gillnets offer some excellent tools for monitoring...look for techniques that can be applied everywhere. (eg Alcala et al 05 Can J Fish Aquat Sci 62: 98 and Rotherham et al 06 J Exp Mar Biol Ecol 331: 226)

p. 31 Socioeconomics monitoring

I'm terribly concerned to find that measuring the improvement for research opportunities seems to take a higher priority than the effects on commercial fishing. I realize that this plan specifically addresses the impacts of the MPAs and perhaps (I hope!) the effects of implementing the MLPA on commercial fisheries will be addressed shortly in a following document. If this is the case, I'd strongly recommend that this be stated as fact, up-front. If not, the MLPA appears, as most of the commercial fishing community strongly believes, to be a means for putting them out of business. This strikes me as the last kind of impression anyone wants to give.

p. 32

I find this apparent distinction between goals/monitoring for MPAs and what happens outside the network to be at best awkward, particularly with the emphasis on ecosystem structure/function. The biological impacts of the displacement of fishing activities coming here, buried deep in a paragraph with little meat behind only increases my discomfort.

Commercial consumptive uses are, at best, medium priority?!

To summarize:

For a draft final, I find this disturbingly vague. The objectives are very general, miss some critical concerns in my opinion and provide only the foggiest indication of how objectives may be met. Key terms are undefined, little attention is paid to ecosystem processes (eg trophic level interactions), no provisions are made for how data would be made available for adaptive management, where data would be stored or managed, and no effort is made to develop a plan that will work for all parts of the state. I realize that this is a work in progress, but there's a lot of progress yet to be made!

I hope that this was helpful.

Sincerely,

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